No. 137, Original

In the

Supreme Court of the United States

STATE OF MONTANA, Plaintiff

v.

STATE OF WYOMING

and

STATE OF NORTH DAKOTA, Defendants

SUPPLEMENTAL OPINION OF THE SPECIAL MASTER

ON WYOMING'S MOTION TO DISMISS BILL OF COMPLAINT

BARTON H. THOMPSON, JR.
Special Master
Jerry Yang & Akiko Yamazaki Environment
& Energy Building
473 Via Ortega
MC: 4205
Stanford, California 94305

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SUPPLEMENTAL OPINION OF THE SPECIAL MASTER
ON WYOMING'S MOTION TO DISMISS BILL OF COMPLAINT

On June 3, 2009, I issued a Memorandum Opinion on Wyoming's Motion to Dismiss Bill of Complaint (the "Memorandum Opinion"). In that opinion, I concluded that Wyoming's Motion to Dismiss should be denied, but that the Yellowstone River Compact, Pub. L. No. 82-231, 65 Stat. 663 (1951) (the "Compact"), does not prohibit pre-1950 appropriators in Wyoming from increasing their consumption on existing acreage to the detriment of pre-1950 Montana appropriators. In Case Management Order No. 2, dated June 12, 2009, I invited the parties to file letter briefs addressing (1) any corrections or clarifications of state law that should be made in the Memorandum Opinion, (2) any clarifications that should be made regarding the conclusions or recommended decision in the Memorandum Opinion, and (3) various other matters concerning the Memorandum Opinion.

The letter briefs of Montana and Wyoming raise three principal issues that I now address in this Supplemental Opinion:[1]

1. Was the Memorandum Opinion correct in concluding that pre-1950 appropriators in Wyoming can increase their consumption on existing irrigated acreage without violating the Compact, and should Montana be allowed to present evidence on the resulting depletions of return flows as part of its case?

2. Was the final paragraph of section III.C.2 of the Memorandum Opinion, at pages 29-30, which concludes that Article V(A) of the Compact protects pre-1950 Montana appropriators against new diversions for storage in reservoirs on the Powder and Tongue tributaries, necessary to resolve Wyoming's motion, and if not, should the paragraph be deleted?

[1] Montana also objects to my use of a Wyoming statute (Wyoming Stat. § 41-3-113) at page 13 of the Memorandum Opinion to define the term "supplemental water" as used in the Compact. Montana's Letter Brief Re Memorandum Opinion on Motion to Dismiss, p. 13 n.2. Montana's objection is valid, and I will eliminate the reference to the Wyoming statute in my First Report to the Supreme Court.

3. Should I add an explicit recommendation in my First Report to the United States Supreme Court to dismiss Montana's reliance on a "depletion" theory of the Compact?

I. INCREASED CONSUMPTION ON EXISTING ACREAGE

In its Letter Brief Re Memorandum Opinion on Motion to Dismiss ("Montana Letter Brief"), Montana challenges my conclusion that Article V(A) of the Compact does not prohibit pre-1950 Wyoming appropriators from increasing their consumption on existing acreage even when it reduces return flow to the detriment of pre-1950 Montana appropriators.[2] The bulk of Montana's letter brief focuses on two arguments. First, Montana argues that the doctrine of prior appropriation in Montana, Wyoming, and other western states has long prohibited appropriators from "'conserving' water by recapturing and reusing water that has contributed to return flow, to the detriment of a downstream appropriator." Montana Letter Brief, p. 1. Second, Montana argues that the cases and statutes on which I relied in section III.C.4 of the Memorandum Opinion do not deal with such "conservation," but instead deal with the inapposite situations of "seepage water," "waste water," or "salvaged water." Id., pp. 2, 6-8.

Having reviewed the various letter briefs and the law on these issues, I remain convinced that my ultimate conclusion in the Memorandum Opinion on the question of increased water consumption on existing irrigated acreage is correct. However, Montana's arguments have convinced me that the legal issues raised by paragraph 12 of Montana's Bill of Complaint deserve a fuller and more detailed treatment than the Memorandum Opinion provided. The following discussion supplements and, in its discussion of Montana's

[2] Wyoming urges me not to address Montana's challenge "because it violates the Special Master's admonition in Case Management Order No. 2 against rebriefing Wyoming's motion to dismiss." State of Wyoming's Response to Montana's Letter Brief Re Memorandum Opinion on Motion to Dismiss, p. 1. As Wyoming notes, the Case Management Order emphasized that the letter briefs were "not an opportunity to rebrief Wyoming's Motion to Dismiss" and warned the parties not to "cover matters already addressed in the briefs filed on that motion." Portions of Montana's letter brief come close to crossing that line. Other portions of Montana's letter brief, however, legitimately seek to clarify or correct matters of state law that the Memorandum Opinion raised for the first time. Because of the importance of fully analyzing the relevant legal issues for the Supreme Court in the First Interim Report, this Supplemental Opinion provides a more detailed discussion of the issues raised by Montana in its letter brief. Given my conclusion that the Memorandum Opinion correctly resolved the ultimate issue of increased consumption, there should be no unfairness to Wyoming.

"salvaged water" statute (Mont. Code Ann. § 45-2-419), replaces section III.C.4 of the Memorandum Opinion.

Montana urges that I postpone resolution of this question until the evidentiary phase. Montana Letter Brief, p. 1. According to Montana, "judicial efficiency" would be best served by "initial presentation of all the evidence of increases in depletions to the compacted surface waters, whether as a result of increases in irrigated acres, increases in storage, increases in groundwater pumping, or increases in consumption on existing acres, as they are all intertwined." Id., p. 15. The Supreme Court, however, has emphasized several times the importance of resolving legal issues at an early stage of original proceedings. Narrowing the contested legal issues can help speed adjudication on the merits and save the parties unnecessary expense in discovery, post-discovery motions, and trial. See, e.g., Ohio v. Kentucky, 410 U.S. 641, 644 (1973). There is no reason to delay resolution of the legal question presented by paragraph 12 of Montana's Bill of Complaint. Rather than promoting judicial efficiency, postponing the legal question would very likely reduce judicial efficiency.

A. Montana's Allegations Regarding Increased Consumption

In paragraph 12 of its Bill of Complaint, Montana alleges that Wyoming has allowed pre-1950 appropriators to increase their "consumption of water on existing irrigated acreage in the Tongue and Powder River Basins … in violation of Montana's rights under Article V of the Compact." According to Montana, pre-1950 Wyoming appropriators have switched from flood to sprinkler irrigation, which can significantly reduce return flows to the waterways:

> It is typical for flood irrigation to consume approximately 65% of the water applied to the fields. The other 35% of the water applied flows back to the stream either on the surface or by percolation through the ground. Use of sprinklers, especially with drop nozzles, can increase the efficiency from 65% to 90% or more. This reduces return flows back to the stream from 35% to 10% or less.

Montana Brief in Support of Motion for Leave to File Bill of Complaint, pp. 15-16.

According to Montana, many of its pre-1950 appropriators depend on this return flow during periods when the tributaries carry little other flow. Montana alleges that increased consumption of water by pre-1950 appropriators in Wyoming can thus reduce the amount of water available to meet the rights of pre-1950 appropriators in Montana, in violation of Article V of the Compact. Montana's Brief in Response to Wyoming's Motion to Dismiss Bill of Complaint, p.47 & n.7; Montana Letter Brief, p. 4.

Paragraph 12 of Montana's Bill of Complaint raises a very different issue than Montana's other allegations do. While the other allegations seek to protect pre-1950 appropriators from later diversions and withdrawals, paragraph 12 seeks to resolve the conflicting claims of two sets of pre-1950 appropriators – pre-1950 Wyoming appropriators who wish to increase their efficiency and consumption, and pre-1950 Montana appropriators who allegedly will have less return flow to divert as a result. Under the Compact, pre-1950 appropriators in both Montana and Wyoming are entitled to the "continued enjoyment" of their appropriative rights.

As discussed in the Memorandum Opinion, the Compact is very clear in protecting pre-1950 appropriators from subsequent diversions and withdrawals. The Compact is less clear in how to resolve conflicts *among* pre-1950 appropriators. As discussed later, both Congress and the negotiators of the Compact believed that "little could be gained, from a water supply standpoint, by attempting, in the compact, the regulation and administration of existing appropriative rights in the signatory states." House Rep. No. 1118, 82d Cong., 1st Sess., at 2 (1951), Joint App. at 26.[3] See also Senate Rep. No. 883, 82d Cong., 1st Sess., at 11 (1951), Joint App. at 22; Yellowstone River Compact Commission, Meeting Minutes of October 24-25, 1950, at 6, Joint App. at 60. Instead, they provided for the continued enjoyment of such rights in accordance with the doctrine of appropriation. Compact, Art. V(A).

[3] In this Supplemental Opinion, documents in the Joint Appendix are referenced as Joint App., followed by the relevant page numbers of the document. References to the transcript of the February 3, 2009 hearing on Wyoming's Motion to Dismiss are indicated by Hearing Trans., followed by the relevant pages and lines of the transcripts.

B. The Language of the Compact

In deciding whether increased consumption on existing acres can violate the Compact, the inquiry must begin as always with the language of the Compact. Unfortunately, the language of the Compact *by itself* does not provide an answer.

The key provision again is Article V(A):

> Appropriative rights to the beneficial uses of the water of the Yellowstone River System existing in each signatory State as of January 1, 1950, shall continue to be enjoyed in accordance with the laws governing the acquisition and use of water under the doctrine of appropriation.

Montana suggests that, because Article V(A) protects only "beneficial uses … existing in each signatory State as of January 1, 1950," pre-1950 Wyoming appropriators are not entitled to more water than they consumed as of that date. Montana Letter Brief, pp. 4-5, 13-14. Article II(H) of the Compact defines "beneficial use" as "that use by which the water supply of a drainage basin is depleted when usefully employed by the activities of man." As Montana correctly emphasizes, beneficial use is central to the concept of prior appropriation and determines not only the legitimacy of an appropriation but also the *measure* and *limit* of an appropriative right. See, e.g., Bailey v. Tintinger, 122 Pac. 575, 580 (Mont. 1912) (beneficial use is the essence of an appropriation); Wyo. Stat. Ann. § 41-3-101 (beneficial use is the "basis, the measure and limit" of an appropriative right).

As discussed later, the concept of "beneficial use" under the prior-appropriation doctrine does not prevent an appropriator from increasing efficiency and consumption on existing acreage. See pages 16-17 infra. Nor do the specific "beneficial use" provisions of the Compact otherwise limit the consumption levels of pre-1950 Wyoming appropriators on the lands they were irrigating as of January 1, 1950. Although one might argue that only water actually *consumed* is "beneficially *used*," prior-appropriation states have generally measured appropriative rights by the amount of water *diverted* from the waterway for a beneficial purpose, not the amount consumed. If the drafters of the Compact had intended to restrict the right of pre-1950 Wyoming appropriators to increase their consumption, they

enjoyed far clearer and more explicit ways to do so. Article V(A), for example, could have protected appropriative rights only "to the amount of water *consumed* for a beneficial use in each signatory state as of January 1, 1950." Compare Wyo. Stat. § 41-3-104(a) (appropriator can transfer water to a new use or place of use provided that the transfer does not "increase the historic amount *consumptively used* under the existing use" – emphasis added).

As Montana notes, Article II(H) defines "beneficial use" as "that use by which the water supply of a drainage basin is *depleted*." Montana argues that, by using the term "depleted," the drafters of the Compact "quantified existing uses in terms of depletion," i.e., consumption, not diversion. Montana Letter Brief, p. 13; Montana's Reply to the Letter Briefs of Wyoming and the United States, p. 2. Article II(H), however, does not define "beneficial use" as the *amount* of water depleted. Instead, Article II(H) merely provides that a "beneficial use" must deplete the water supply of a basin. There is nothing in the history of the compact to suggest an intent to define the rights protected by Article V(A) in terms of consumption rather than diversion.

The beneficial-use language in Article V(A) speaks not to whether appropriators can increase consumption by improving irrigation efficiency, but instead to the *types* of uses that the Compact protects. The principal purpose of the "beneficial use" doctrine in prior appropriation law is to ensure that water is appropriated and used for only *valuable* purposes and is not wasted. Reflecting this purpose, Article II(H) defines "beneficial use" as a use that depletes a drainage basin "when usefully employed by the activities of man." The Compact's language says nothing one way or the other regarding the right of a pre-1950 appropriator to increase the efficiency or intensity of his or her "beneficial use" subsequent to the passage of the Compact.

Montana also suggests that any post-1950 increases in consumption fall under Article V(B), which apportions the "*unused* and unappropriated waters of the Interstate tributaries of the Yellowstone River as of January 1, 1950" (emphasis added), rather than Article V(A). If true, increases in consumption would be subordinate to the pre-1950 appropriative rights protected under Article V(A). Article V(B), however, speaks of "unused" not "unconsumed" waters. In normal parlance, water that is diverted from a river for a beneficial purpose is "used" even if it is not fully "consumed." The language of Article V(B) thus does not

suggest that increases in consumption by pre-1950 appropriators fall under its provisions rather than those of Article V(A).[4]

In previous briefs, Montana has similarly argued that, if the Compact were interpreted to permit pre-1950 appropriators to increase their water consumption under Article V(A), the interpretation would render superfluous the provision for "supplemental rights" in Article V(B). See, e.g., Montana's Brief in Response to Wyoming's Motion to Dismiss Bill of Complaint, p. 49. As the Memorandum Opinion observes, Article V of the Compact establishes a three-tier hierarchy of rights: (1) pre-1950 appropriative rights, (2) "supplemental water supplies for the rights described in paragraph A of this Article V," and (3) other new appropriative rights. In Montana's view, the provision for "supplemental rights" covers exactly the type of consumption increases to which Montana objects. According to Montana, allowing pre-1950 Wyoming users to increase consumption under Article V(A) destroys the Compact's hierarchy and makes unnecessary the portion of Article V(B) providing for "supplemental rights."

Where a pre-1950 appropriator needs additional water for use on existing irrigated acreage, however, the appropriator has at least two means of obtaining the water. The appropriator can increase his or her efficiency, saving enough water to meet his or her unmet needs, or the appropriator can divert more water. Article V(A) clearly does not allow increased diversions, so an appropriator wishing to go this latter route would need to avail himself or herself of the provision for "supplemental rights" in Article V(B). Thus, if Article V(A) permits increased consumption of existing diversions, the provision for "supplemental rights" still has independent meaning and significance. Article V(B), moreover, refers not to "supplemental water" but to "supplemental water *supplies*" (emphasis added), strongly suggesting that the provision refers to new diversions of water rather than to merely a more

[4] By apportioning the "*unused* and unappropriated waters" in Article V(B), the drafters likely intended to address the problem of unexercised appropriative rights (what are sometimes known as paper rights). Paper rights are a significant problem in the western United States because they can deter new appropriations of unused water. See, e.g., Michael McIntyre, The Disparity Between State Water Rights Records and Actual Water Use Patterns: "I Wonder Where the Water Went?," 5 Land & Water L. Rev. 23 (1970) (noting that there are often significant differences between the water rights recorded in state water agencies and the water actually used). Cf. Kansas v. Colorado, 514 U.S. 673, 690 (1995) (holding that, under the Arkansas River Compact, Colorado pumpers cannot increase their pumping beyond pre-compact levels). Under the language of Article V, any attempt to use rights that existed only "on paper" as of January 1, 1950, would seem to fall under Article V(B) rather than V(A).

"efficient" and thus consumptive use of *existing* water supplies. One would not normally speak of improved irrigation efficiency as providing "supplemental water *supplies*."

In determining whether the Compact restricts pre-1950 Wyoming appropriators to the amounts of water that they were *consuming* rather than *diverting* as of January 1, 1950, it is informative that, in deciding how to allocate unused and unappropriated water under Article V(B) of the Compact, the negotiators decided to apportion water on the basis of divertible flow rather than consumptive use. The earliest drafts of the Compact provided for apportionment of divertible flow. See, e.g., Burke Draft, p. 10, Joint App. at 135. In late 1950, however, the chairman of the Engineering Committee submitted a proposal that would have apportioned water instead on the basis of annual consumptive use. See Myers Draft, p. 9, Joint App. at 206; Yellowstone River Compact Commission, Meeting Minutes of Oct. 24-25, 1950, at 13, Joint App. at 67. The Engineering Committee's draft of the Compact and the final Compact, however, chose to allocate waters based on divertible flow. See Engineering Committee Draft, p. 11, Joint App. at 173. According to Congress, the negotiators chose a divertible flow approach because it "had been used in earlier negotiations and was more familiar to the commissioners." Senate Rep. 883, supra, p. 7, Joint App.18.

C. Article V(A) and the Doctrine of Appropriation

The language of the Compact thus does not by itself provide an answer to the legal question posed by paragraph 12 of Montana's Bill of Complaint. If an answer is to be found, it lies in Article V(A)'s reference to the "laws governing the acquisition and use of water under the doctrine of appropriation." Under the Compact, pre-1950 appropriators in both Montana and Wyoming are entitled to the continued enjoyment of their rights only "in accordance with" such laws. If the "laws governing the acquisition and use of water under the doctrine of appropriation" clearly proscribe increases in consumption on existing acreage to the detriment of downstream appropriators, the Compact would prohibit Wyoming from allowing its appropriators to make such increases to the detriment of pre-1950 Montana rights. Not surprisingly, Montana devotes the bulk of its Letter Brief to trying to show that the doctrine of prior appropriation prohibits senior appropriators from increasing their consumption to the detriment of downstream appropriators. See Montana Letter Brief, pp. 1-12.

Unfortunately, whether and under what circumstances an appropriator can increase consumption to the detriment of downstream appropriators is not one of the clearer areas of prior-appropriation law. According to the late Dean Frank Trelease, "Perhaps no area of the doctrine of prior appropriation is so confused as is the law pertaining to seepage or return flows." Frank J. Trelease, Reclamation Water Rights, 32 Rocky Mtn. L. Rev. 464, 469 (1960). The result in some cases, for example, can depend on whether a court decides that previously unconsumed water was "seepage water," "waste water," "surplus water," or "return flow," yet courts seldom define these terms or explain why they should matter to the result. Adding to the confusion, different courts often use these terms in different ways and attach different consequences to the resulting classifications.

No western state court appears to have conclusively answered the question posed by paragraph 12 of Montana's Bill of Complaint: can (1) an agricultural appropriator, (2) increase his or her consumption of water, (3) on the same irrigated acreage to which the appropriative right attaches, (4) to the detriment of downstream appropriators, (5) in the same water system from which the water was originally withdrawn? Although Montana observes that it is "not aware of a single case in any jurisdiction in which a court allowed a senior appropriator to increase efficiency and thereby decrease historic return flows to a fully appropriated natural watercourse" (Montana Letter Brief, p. 8), none of the parties or amici in this case has cited a case to the contrary either. Despite significant independent research, I also have been unable to find a case that is on all fours with the question posed here.

In resolving closely related questions, however, courts have considered a variety of factors that are also informative here. One factor is *policy*. As explained below, the prior appropriation doctrine has historically assigned high value to security of water rights. Water is often used over and over again as it travels down a river. One user may withdraw water to irrigate his crops. While some of his crops will consume part of that water, the remainder will often return to the river, where it will be used again by someone further downstream. To provide greater security to downstream users, the appropriation doctrine frequently protects downstream users from formal changes in upstream rights that reduce return flow on which the downstream users rely. Courts and legislatures, however, have often allowed water right holders to change their water use, even to the detriment of other users, in order to promote

other policy goals such as conservation, improved water efficiency, or water quality. A second factor to which courts and legislatures have sometimes looked in addressing issues in this area is *practicality*. If the costs and difficulty of administering a water system grow too high, the system can become inflexible, burdensome, and ineffective.

1. "Choice of Law"

An initial question is what law the Compact incorporates – the law of the signatory states, some idealized body of appropriation law, laws in effect in 1950, laws in effect today? As noted in the Memorandum Opinion, Article V(A) does not explicitly say the laws of Montana and/or Wyoming, nor does it say the laws in effect at the time the Compact went into effect. Instead, it refers broadly and without time reference to "laws … under the doctrine of appropriation." When interpreting the Compact, it is logical to look first at the laws of Montana and Wyoming (and North Dakota where relevant). These would have been the laws of greatest familiarity to the Compact negotiators and the state legislatures that ratified the Compact. It seems unlikely, moreover, that those involved in the drafting and ratifying of the Compact would have intended significantly different appropriation laws to apply to pre-1950 water users in the Yellowstone River Basin than to other existing appropriators in the signatory states. General practices in other prior-appropriation states, however, can be helpful in providing a context for and better understanding of Montana and Wyoming law and in resolving issues where Montana and Wyoming law do not point to an answer.

The Compact's history also cautions against imposing new requirements or procedures on the management of pre-1950 appropriative rights unless the "laws governing the acquisition and use of water under the doctrine of appropriation" clearly require them. While the drafters were intent to protect pre-1950 appropriators from later diversions and withdrawals (see Memorandum Opinion, pp. 21-26), they recognized that the signatory states differed in some aspects of their administration of existing rights, and they explicitly declined at several points to create a unitary system for regulating and administering pre-1950 appropriative rights. As the House of Representatives noted in its report on the Compact, extensive studies had "disclosed that little could be gained, from a water supply standpoint, by attempting, in the compact, the regulation and administration of existing appropriative

rights in the signatory States." House Rep. No. 1118, 82d Cong., 1st Sess., at 2 (1951), Joint App. at 26. See also Senate Rep. No. 883, 82d Cong., 1st Sess., at 11 (1951), Joint App. at 22.

At the meeting of the Yellowstone River Compact Commission in late October 1950, P.F. Leonard, one of Montana's representatives, expressed Montana's view that "there should be a provision in the Compact that existing rights shall be administered under the Compact by the Administrative Commission that may be established." Yellowstone River Compact Commission, Meeting Minutes of Oct. 24-25, 1950, at 6, Joint App. at 60. Wyoming, however, rejected the idea. Id. (statement of R.E. McNally); Id., at 13, Joint App. at 67. According to the meeting minutes, the Engineering Committee had concluded that there was "little to be gained from a water supply standpoint by regulating and administering existing diversions under a Compact." Id. at 6, Joint App. at 60.

Later in the same session, Mr. Leonard of Montana "insisted that under the Doctrine of Appropriation state lines must be wiped out" and argued that established rights be recognized "under interstate administration." Id., at 13, Joint App. at 67. Montana actually suggested amending the language that would become Article V(A) to provide that pre-1950 rights be administered under the law of appropriation "including the principle of priority, regardless of state line."[5] Id. at 17, Joint App. at 71. After discussion, however, the suggestion was dropped. Id.

The negotiators saw little benefit and significant difficulty in trying to administer all pre-1950 rights under the Compact on an interstate basis, particularly given the differences in water law among the signatory states and the difficulties this would pose for interstate administration. The Engineering Committee discussed the question in its letter of October 23, 1950 to the chair of the Compact Commission:

[5] P.F. Leonard made a similar suggestion in proposals of August 23, 1950. Under Leonard's draft of Article V(A), pre-1950 rights would have continued to be enjoyed "in accordance with the general law governing the acquisition and use of waters under the Doctrine of Appropriation and on the basis of priorities thereunder *as single streams and regardless of state lines*." Proposals Made by P.F. Leonard, Aug. 23, 1950, Joint App. at 235 (emphasis added).

> Concerning treatment of existing developments in the Compact, the committee is of the opinion that there is little to be gained from a water supply standpoint by regulating and administering existing diversions under a Compact. It is, of course, entirely up to the Commission whether or not existing rights are to be administered under the Compact, but from an engineering standpoint, the committee feels that the expense and difficulties of such an administration would in no way justify the benefits that might be obtained. There are insufficient data upon which to base this type of administration due principally to differences in the water laws of the States involved. It would be a major research project to place existing rights in all States on an equivalent basis. Such procedure undoubtedly would involve interstate adjudication procedures.

Letter of Engineering Committee to R.J. Newell, Oct. 23, 1950, pp. 1-2, Joint App. at 231-232.

The federal representative to the Compact Commission repeated this point in his report to Congress, reprinted in the House and Senate Reports on the Compact. According to the federal representative, apportioning water among the pre-1950 appropriative rights would be both complicated and unnecessary. Determining and fixing "comparable values for existing rights" would be "a huge and time-consuming task … in three States with differing water laws and practices in establishing water rights. Senate Rep. 883, supra, at 6, Joint App. at 17. Moreover, if storage was constructed as everyone hoped, there would be enough water for all pre-1950 uses. Id., at 6-7, Joint App. at 17-18.

2. General Principles of Appropriation Law

Before looking at what the laws of Montana and Wyoming say or do not say about increased consumption, it is useful to look first at the more general principles followed by prior-appropriation states. Three areas of case law are of particular relevance in trying to resolve the dispute between Montana and Wyoming over increased consumption: (1) the "no injury" rule, (2) the "beneficial use" doctrine, and (3) the "capture and reuse" or reclamation of waste water.

a. The "no injury" rule for changes in water rights.

The prior appropriation doctrine has long protected downstream appropriators from formal changes in upstream water rights that reduce return flow to the waterway and thereby reduce the amount of water available to the downstream appropriators. Although the law has long permitted and even encouraged changes in water rights, states have sought to protect the interest of downstream appropriators who have grown reliant on the return flow from the existing use. Writing at approximately the same time as the Compact, the Colorado Supreme Court noted the "well established" principle that "junior appropriators have vested rights in the continuation of stream conditions as they existed at the time of their respective appropriations" and can therefore complain of "all proposed changes in points of diversion and use of water from that source which in any way materially injures or adversely affects their rights." Farmers Highline Canal v. Golden, 272 P.2d 629, 631-632 (Colo. 1954). Every state therefore generally prohibits appropriators from changing the purpose or place of their use, or the point from which they divert water, if that change would injure downstream appropriators by decreasing return flows upon which they rely. Statutes in both Montana and Wyoming codify this basic rule. See, e.g., Mont. Code Ann. § 85-2-402; Wyo. Stat. Ann. § 41-3-104.

The "no injury" rule, however, is not inviolable. Western states have adopted several exceptions to the rule where they have concluded that the benefits of allowing a change outweigh the cost to downstream appropriators. A number of states, for example, permit cities to sell sewage effluent that historically returned to a waterway and was used by downstream appropriators. In Arizona Public Service Co. v. Long, 773 P.2d 988 (Ariz. 1989), two cities that had long discharged treated sewage effluent into the Salt River, where it was appropriated and used by downstream appropriators, sought instead to sell the sewage effluent to several utilities. The court held this permissible even though it would reduce the water available to the downstream appropriators. According to the court, downstream water users can appropriate sewage water that a city voluntarily permits to return to a stream, but cannot insist on its continued discharge. Two policy considerations influenced the court's decision: (1) the importance of allowing cities to dispose of sewage effluent in an efficient and environmentally sound fashion, and (2) the need to avoid waste.

> No appropriator can compel any other appropriator to continue the waste of water which benefits the former. If the senior appropriator, through scientific and technical advances, can utilize his water so that none is wasted, no other appropriator can complain. See Reynolds v. City of Roswell, 99 N.M. 84, 654 P.2d 537 (1982); Bower v. Big Horn Canal Association, 77 Wyo. 80, 307 P.2d 593 (1957). The junior appropriator, using waste water, "takes his chance" on continued flow. Thayer v. Rawlins, 594 P.2d 951 (Wyo. 1979). To hold otherwise and require the Cities to continue to discharge effluent would deprive the Cities of their ability to dispose of effluent in the most economically and environmentally sound manner …. Moreover, such a holding would be contrary to the spirit and purpose of Arizona water law, which is to promote the beneficial use of water and to eliminate waste of this precious resource. ….

Id. at 996-997. See also Metropolitan Denver Sewage Disposal Dist. v. Farmers Reservoir & Irrig. Co., 499 P.2d 1190 (Colo. 1972) (city can change point of return of sewage effluent even if it injures downstream appropriators).[6]

In the present case, Montana alleges that pre-1950 Wyoming appropriators are using irrigation improvements to increase water consumption on the *same acreage* and for the *same use* as before. Montana has not alleged that the Wyoming appropriators are changing their place of use, point of diversion, or type of use (at least as that term is employed in change-of-use statutes). As a result, cases and statutes protecting downstream appropriators from such formal changes in water rights are not directly applicable.

States, moreover, do not generally have procedures for overseeing changes in water efficiencies stemming from crop shifts or irrigation improvements where there are no formal changes in the underlying water rights. Before appropriators change their place or type of

[6] Other exceptions also exist to the "no injury" rule for changes in water rights. Some courts, for example, allow water users who *import* water from foreign watersheds to increase their consumption of that water even to the detriment of other appropriators who have grown reliant on return flow. See, e.g., Stevens v. Oakdale Irrigation Dist., 90 P.2d 58 (Cal. 1939); City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 74 (Colo. 1996).

use or change their point of diversion, most states require them to apply for state approval – giving the states an opportunity to evaluate, among other factors, whether a change would reduce return flow to other appropriators. Reflecting the difference between these changes and mere increases in efficiency or consumption on existing acreage, state change procedures do not typically apply to changes only in crops or irrigation techniques.[7] Neither Montana nor Wyoming, for example, applies their change procedures to such actions. In order to effectively oversee shifts in efficiency or consumption that do not involve changes in place or type of use or point of diversion, states would thus need to extend existing procedures to a new setting or develop new procedures. Irrigators would need to seek state approval when they shifted to more water-intensive crops or improved their irrigation equipment.

b. Beneficial use.

As a historical matter, appropriators also could not take water that they did not need on the land to which the water right attached and use it on *different* land. Under the traditional doctrine of prior appropriation, any unneeded water had to return to the waterway for use by others. For this reason, appropriators could not save water by improving their irrigation practices and then either sell that water to another user or use the water on other land they owned. In Salt River Valley Water Users' Ass'n v. Kovacovich, 411 P.2d 201 (Ariz. App. 1966), for example, an appropriator saved water by lining and improving its ditches and then sought to use the water on adjacent land. The Arizona Court of Appeals held that this violated the beneficial-use rule because the appropriator, having improved its ditches, no longer needed the saved water to irrigate crops on the land to which the appropriative right attached. The saved water was therefore no longer being put to a beneficial use on the appurtenant land and had to return to the stream "to the benefit of other water users." Id. at 204. Because this rule can discourage useful conservation, Montana and several other states have adopted statutes in recent decades allowing appropriators to keep and use conserved water in at least some situations. See, e.g., Cal. Water Code § 1011; Mont. Code Ann. § 85-2-419; Or. Rev. Stat. §§ 537.455 to 537.500.

[7] This does not mean that there is no way to challenge increases in efficiency. Downstream water users, for example, can always sue to enjoin the upstream appropriator from increasing consumption or to force the upstream appropriator to replace the lost runoff. See, e.g., Estate of Paul Steed, 846 P.2d 1223 (Utah 1992) (downstream appropriator sued to force the upstream appropriator to replace lost runoff). Such individual actions, however, do not substitute for consistent state oversight.

Montana's allegations do not trigger the traditional concerns of the beneficial use doctrine. According to Montana, Wyoming appropriators are not seeking to take unneeded water and use it elsewhere. Instead, they are seeking to make increased, more efficient use of water on the very acreage to which their rights attach. Water uses generally raise concerns under the beneficial use doctrine when they are *inefficient*, not *efficient*.

c. The "capture and reuse" or reclamation of waste water.

A number of cases discuss the capture and reuse of water that is left over after appropriators irrigate or otherwise use water on their land. Courts use a variety of labels to describe this water. Depending on the context, courts have called this water "seepage," "waste," "wastage," "run-off," "percolation," and various other terms. The use of this terminology, unfortunately, is often inconsistent among courts and even among cases in the same jurisdiction, so that too much weight cannot be placed on the particular terminology used in any case. The law on the capture and reuse of water also differs more among states than the "no injury" rule or the beneficial use doctrine do, dictating caution in generalizing from the law of any particular state.

One line of cases deals with the right of property owners to appropriate what is often labeled "seepage" water – vagrant water that runs or diffuses across a property owner's land after being used for irrigation or other purposes on neighboring land. In many states, property owners cannot appropriate such "seepage" water while the water remains vagrant and diffuse. See, e.g., Thompson v. Bingham, 302 P.2d 948, 949 (Idaho 1956). Although property owners can nonetheless generally capture and use such water as it crosses their properties, they cannot demand that the original appropriator maintain the source of the seepage. See, e.g., Thompson v. Bingham, supra, 302 P.2d at 949-950; Crawford v. Inglin, 258 Pac. 541, 543 (Idaho 1927); Garns v. Rollins, 125 Pac. 867, 872 (Utah 1912). As a result, the original appropriator is always free to recapture the water and apply it to a beneficial use. See, e.g., Thompson v. Bingham, supra, 302 P.2d at 949; Crawford v. Inglin, 158 Pac., supra, at 543; Garns v. Rollins, supra, 125 Pac. at 872. However, once such "seepage" water makes it to a natural waterway (or, in some states, even to a confined canal), most states permit water users to divert and appropriate the water from the waterway. See,

e.g., Sebern v. Moore, 258 Pac. 176, 178 (Idaho 1927) (canal); McNaughton v. Eaton, 242 P.2d 570 (Utah. 1952) (waterway); McNaughton v. Eaton, 242 P.2d 570, 574 (Utah 1952) (waterway). According to the United States Supreme Court, "Considerations of both public policy and natural justice strongly support" the rule that an appropriator has a right to capture and reuse their own waste water "from surface run-off and deep percolation, necessarily incident to practical irrigation." Ide v. United States, 263 U.S. 497, 506 (1924), quoting United States v. Haga, 276 Fed. 41, 43 (D. Idaho 1921).

A second and partially overlapping line of cases hold that appropriators can capture and reuse waste water while the water is still on their property. As the Oregon Supreme Court has written,

> an appropriator is justified in recapturing waste water remaining upon his land and in applying it to a beneficial use. In fact it is said that water "is not waste water so long as it remains upon the land of the original appropriator." It would seem that an appropriator should be commended for recapturing water that has already been used by himself and applying it again in a beneficial manner.

Barker v. Sonner, 209 Pac. 1053, 1054 (Ore. 1931) (citations omitted). See also McNaughton v. Eaton, 242 P.2d 570, 574 (Utah 1952). While some of these cases involve diffused water, others do not. See, e.g., id. As a corollary to the basic rule, the cases also hold that an appropriator cannot try to capture and reuse such water after the water has flowed into a natural waterway; water must be captured on the land where it is originally used.

If appropriators can capture and reuse waste water while it is still on their land, it would seem to follow that appropriators have a right to reduce or eliminate the waste entirely by increasing irrigation efficiency, lining canals, and similar actions. In Hidden Springs Trout Ranch, Inc. v. Hagerman Water Users, Inc., 619 P.2d 1130 (Idaho 1980), the Hagerman Water Users ("Hagerman") had long tried to reduce leakage from a ditch they used to transport water for use. The leaking water formed a spring, from which Hidden Springs had long diverted water. When Hagerman succeeded in reducing the leakage by

replacing the ditch with a steel pipe, Hidden Springs objected. Citing Bower v. Big Horn Canal Assoc., 307 P.2d 593 (Wyo. 1957), the court held that no distinction should be made "between water appropriated after it has been put to irrigation use and waste water seeping from irrigation canals." 619 P.2d at 1133. "No appropriator of waste water should be able to compel any other appropriator to continue the waste of water which benefits the former." Id. at 1134. A rule allowing downstream appropriators to "enforce the continuation of waste will not result in more efficient uses of water." Id. As a result, an appropriator is free to "reclaim" reasonable seepage, "for instance, by improving his transmission system." Id.

d. Increased consumption from changes in crops and irrigation systems.

As noted, the parties have not pointed to any case in which a court has directly decided whether an appropriator can increase its consumption to the detriment of downstream appropriators on the same waterway from which the water was originally diverted. The Utah Supreme Court, however, has addressed the issue in passing. In East Bench Irrigation Co. v. Deseret Irrigation Co., 271 P.2d 449 (Utah 1954), 23 different irrigators on the south fork of the Sevier River sought to change the place of diversion and type of use for their waters over the objection of downstream appropriators reliant on the return flow. The water users argued that it should not matter that the changes would reduce return flow because the water users could "legally increase the quantity of water consumed in irrigating their lands by changing to more water consuming crops, by applying more water on their presently irrigated lands and by bringing under cultivation presently irrigated and even non-irrigated pasture lands" – all to the same effect on consumptive use. Id. at 455. The Utah Supreme Court disagreed because, as a matter of both common law and statute in Utah, appropriators cannot change their points of diversion or places of use to the impairment of other appropriators' vested rights. Id. The court, however, "assum[ed] without conceding" that the irrigators could increase consumption on their existing acreage. Id. According to the court, "it would be difficult to prevent plaintiffs from making such increased consumptive use of this water." Id. The plaintiffs "could increase the amount of water consumed by changing the kind of crops, the manner of use and intensity of irrigation … under conditions which require no application for a change." Id.

In Estate of Paul Steed v. New Escalante Irrigation Co., 846 P.2d 1223 (Utah 1992), the New Escalante Irrigation Company switched from flood irrigation to sprinklers, reducing runoff on which a downstream appropriator relied. The Utah Supreme Court held that the New Escalante Irrigation Company had the right to do so even over the objections of the downstream appropriator. The court relied on prior cases holding that "a reappropriator acquire[s] no rights as against the original appropriator to have the waste water continue" and that appropriators can capture and reuse waste waters "if he does so before they get beyond his property and control." Id. at 1225-1226. According to the court, "efficient and beneficial use of water should be encouraged. In furtherance of that objective, an appropriator should be encouraged to apply water in the most efficient manner." Id. at 1229.

Because the case did not involve return flow to the same waterway from which the water was diverted, however, *Estate of Paul Steed* is not authority for holding that pre-1950 appropriators can increase their consumption in this case. While New Escalante diverted water from the Escalante River, the runoff flowed into Alvey Wash, a natural watershed to which the Escalante River did not directly contribute any water. Id. at 1223-1224. The Utah Supreme Court, moreover, noted that the "rule that the upstream irrigator [has] the right to completely consume all the water it diverted, by using it over and over again," does not apply "when the runoff or waste water return[s] to the stream from which it was originally diverted." Id. at 1225. Where runoff or waste water reaches and reenters a stream system from which it was diverted, water "becomes a part of that watercourse in legal contemplation as well as physically, and from the standpoint of rights of use, it is just as much a part of the flow as is the water with which it is mingled." Id., quoting Wells A. Hutchins, Selected Problems on the Law of Water Rights in the West 362-368 (1942). Yet in support of this distinction, the court cited *East Bench Irrigation Co.*, which as just described, "assume[d] without conceding" that irrigators could increase consumption on their existing acreage by, for example, switching to more water-intensive crops or applying more water.

The only legal commentary that I have found explicitly addressing the question of whether an irrigator can switch to a more efficient irrigation system or more water-intensive crops concludes that such a switch is legal even if it reduces downstream flows to other appropriators. See David H. Getches, Water Law in a Nut Shell 144 (2009). Dean Getches begins by stating that waters "originating within the watershed generally can be recaptured

and reused by an appropriator if: (1) the total used does not exceed rights under a permit or decree; and (2) the recapture and reuse occur within the land for which the appropriation was made." Id. at 139. Dean Getches then discusses what happens if recapture and reuse leads to more water consumed:

> For instance, if a water user is consuming less than the permitted amount of water and plants a more water-intensive crop or puts in a more efficient irrigation system, most or all of the water that had previously been returned to the stream might be consumed. This can deprive other appropriators of water on which they depend but it is allowed since it is technically within the terms of the original appropriation.

Id. at 144.

3. Wyoming law.

This brings us to the laws of Wyoming and Montana which, as emphasized earlier, are the laws of most relevance in interpreting the Compact. As noted in the Memorandum Opinion, the Wyoming Supreme Court has addressed the right of an appropriator to reduce its waste of water in at least three cases, one of which was decided prior to the negotiation of the Compact. In Binning v. Miller, 102 P.2d 54 (Wyo. 1940), Charles Bayer was diverting water from a swale, "Spring Gulch Creek," that collected runoff from the irrigation operations of Burleigh Binning. When Binning sought to block the runoff before it reached the swale, Bayer objected. Bayer claimed the right to take the water pursuant to both an alleged 1906 appropriation of the water by George M. Glover, a predecessor in interest, and a 1936 "correction of the adjudicated right" by the Wyoming Board of Control. Looking first at the 1906 appropriation, the Wyoming Supreme Court held that, because Spring Gulch Creek was not at that time a natural stream, Glover did not have a right to appropriate the "seepage and waste water." Id. at 59. The "authorities seem to agree that the lower owner using such water merely takes his chances that the supply will be kept up; that he has no right thereto, no matter how long he may have used it." Id. at 60.

The court found, however, that by 1936 Spring Gulch Creek had become a natural stream, "with very definite channels and banks and so forth." Id. at 63. As a result, the "water running in the stream," including the runoff from Binning's irrigation, was "subject to appropriation." Id. Bayer therefore had a right to the runoff, which Binning could not cut off. Id. However, even though the runoff was now flowing into a natural stream and Bayer had a right to appropriate it, the court held that Binning could still capture and reuse the runoff on his land. "In view of the uncertainty of the future, the right of [Bayer] should be made subject to the *usual rights of landowners*, namely, the right of Binning and his successors in interest to use the water above mentioned for beneficial purposes *upon the land for which the seepage water was appropriated*, should such beneficial purpose be possible." Id. (emphasis added).

Six years after the Compact went into effect, the Wyoming Supreme Court had occasion again to address rights to runoff from irrigation operations. In Bower v. Big Horn Canal Ass'n, 307 P.2d 593 (Wyo. 1957), water seeped from the Big Horn Canal toward the Big Horn River, passing across Ray Bower's property. When Bower sought to capture and use this runoff on his property before it reached the river, the Big Horn Canal Association objected, urging that Bower had no right to appropriate its "seepage water." The Wyoming Supreme Court disagreed. According to the court, *Binning* had held that "seepage water which, if not intercepted, would naturally reach a stream is just as much a part of the stream as the water of any tributary" and is appropriable. Id. at 602. Bower did not have to wait until the water reached the river to appropriate it. But "any rights [Bower] secured thereby are subject, of course, to the right of [the Big Horn Canal Association] to terminate that source of the supply which seeps directly from [its] canal." Id. According to the court,

> No appropriator can compel any other appropriator to continue the waste of water which benefits the former. If the senior appropriator by a different method of irrigation can so utilize his water that it is all consumed in transpiration and consumptive use and no waste water returns by seepage or percolaton [sic] to the river, *no other appropriator* can complain.

Id. at 601 (emphasis added).

The Wyoming Supreme Court again addressed rights to "seepage or waste water" in Fuss v. Franks, 610 P.2d 17 (Wyo. 1980). *Fuss* dealt with water that ran off the irrigation property of several landowners (the "appellants") into a highway borrow pit. One of the appellants sought to convey the water from the borrow pit for use on other lands that he leased and farmed, but Franks diverted the water first for use on his land. Id. at 18-19. Because this water "would, if uninterrupted, flow into a natural stream," the court held that Franks could appropriate the water. Id. at 19-20. Under *Binning,* "the owner of land upon which seepage or waste water rises has the right to use and reuse – capture and recapture – such waste waters for use only 'upon the land for which the water forming the seepage was originally appropriated.'" Id. at 20, quoting *Binning*. In *Fuss*, however, the appellants sought to recapture the water after it had left their land and for use on other property. As a result, the appellants had no "superior right to such water." Id. Waters "become appurtenant to the lands for which they are acquired," and "unless the statutes are followed with respect to change of use, the waters cannot be detached and assigned to other land without the loss of priority." Id.

Montana argues that *Binning, Bower,* and *Fuss* are irrelevant to this case because they involve "seepage" or "waste" water and are an exception to general rules regarding runoff. However, as explained, all three of the Wyoming cases involved runoff from agricultural land that, in the case of *Binning*, had actually become part of a natural stream (albeit a stream made up primarily if not entirely of agricultural runoff) and, in the other cases, would have naturally reached a stream (and thus was "just as much a part of the stream as the water of any tributary"). The language of the Wyoming Supreme Court, moreover, was expansive in all three cases. In each case, the court held explicitly that appropriators have a right to reduce waste even to the detriment of other appropriators who had become reliant on the runoff. *Binning,* 102 P.2d at 60; *Bower*, 307 P.2d at 601-602; *Fuss,* 610 P.2d at 20.

Nothing in the court's language suggests that the announced rule is limited to only a subset of situations. Although the Wyoming Supreme Court might distinguish a future case in which the runoff flowed to the same waterway from which the water was originally appropriated, the language and logic of *Binning* and its progeny strongly suggest that the court would reach the same result in such a case. It is informative that other courts have read *Binning* and its progeny to speak broadly to the right of an appropriator to eliminate water waste even to the detriment of downstream appropriators. See, e.g., *Arizona Public Service Co.*, supra, 773 P.2d at 996-997 (discussed at pp. 14-15); *Hidden Springs Trout Ranch*, supra, 619 P.2d at 1133 (discussed at pp. 18-19).

4. Montana law.

No opinion of the Montana Supreme Court speaks as directly as *Binning* and its progeny to the right of appropriators to increase their irrigation efficiency and thus their level of water consumption. The Montana Supreme Court, like other western courts, has long held that appropriators cannot change their place or type of use if that would change return flow to the detriment of downstream appropriators. See, e.g., Cate v. Hargrave, 680 P.2d 952 (Mont. 1984) (change in use); Whitcomb v. Helena Water Works Co., 444 P.2d 301, 304 (Mont. 1968) (change in storage); Quigley v. McIntosh, 103 P.2d 1067, 1072 (Mont. 1939) (expansion of use to new lands); Mannix & Wilson v. Thrasher, 26 P.2d 373, 374-375 (Mont. 1933) (change in place and manner of use); Featherman v. Hennessy, 115 Pac. 983, 986 (Mont. 1911) (change in use) As the Montana Supreme Court stated over a century ago, "each subsequent appropriator is entitled to have the water flow in the same manner as when he located." Spokane Ranch & Water Co. v. Beatty, 96 Pac. 727, 731 (1908). The Montana Supreme Court has also held that water users are not entitled to divert from a stream more water than they need for use on the land to which their right attaches. See, e.g., Whitcomb, supra, 444 P.2d at 303-304; Conrow v. Huffine, 138 Pac. 1094, 1096 (Mont. 1914). As explained earlier, however, such cases do not resolve the issue in this case because Montana does not allege that Wyoming appropriators are attempting to change their place or purpose of use or are using more water than they need on their acreage.

As to "seepage water," the Montana Supreme Court has held that no one can appropriate such water if it is vagrant and diffuse; those who capture such water cannot insist on the continued flow of such water. See Popham v. Holloron, 275 Pac. 1099, 1102 (Mont. 1929). Seepage waters, however, are a "proper subject of appropriation" when they reach a watercourse – or even a drainage ditch beyond the control of the original appropriator. Id. at 1102-1103. See also Wills v. Morris, 50 P.2d 862, 870-871 (Mont. 1935); Rock Creek Ditch & Flume Co. v. Miller, 17 P.2d 1074, 1077 (Mont. 1933). By itself, however, this does not answer the question of whether the original appropriator can reduce the wastage that is subsequently appropriated.

Once runoff reaches a natural waterway, opinions of the Montana Supreme Court provide that the original appropriator can no longer recapture that water. See, e.g., *Rock Creek Ditch & Flume Co.*, 17 P.2d at 1077. These cases, however, appear to address *where* water can be recaptured, not whether appropriators can increase their consumption. As the Montana Supreme Court noted in *Rock Creek Ditch & Flume Co.*, when water flows from the property of the appropriator, that water is abandoned; this is "not an abandonment of a water right, but an abandonment of specific portions of water, viz., the very particles that are discharged or have escaped from control." 17 P.2d at 1077, quoting Samuel C. Wiel, Water Rights in the Western United States § 37 (3d ed. 1911). Thus, an appropriator can collect or recapture runoff "before it leaves his possession, but after it gets beyond his control it … becomes waste and is subject to appropriation by another." Id. at 1080.

Montana case law is ultimately inconclusive on the key question of whether an appropriator can consume more on existing acreage by switching from flood to sprinkler irrigation. Montana statutory law is no more accommodating. In 1991, Montana passed a new "Salvaged Water" statute that declares the policy of Montana to "encourage the conservation and full use of water." Mont. Code Ann. § 85-2-419. The statute permits appropriators to salvage water and "retain the right to the salvaged water for beneficial use." Id. The appropriator must seek approval from the Department of Natural Resources and Conservation only if it seeks to use the salvaged water for a new use or in a different location. Id. Salvage is defined as making "water available for beneficial use from an existing valid appropriation through application of water-saving methods." Id. § 85-2-

102(20). The statute "encourages water rights holders to take steps to save water by improving their efficiency. As an incentive, the statute authorizes water rights holders to retain and use water saved, rather than having it simply revert back to the stream for further appropriation." In re Applications for Change of Appropriation of Water by Smith Farms, Inc., 1999 Mont. Dist. LEXIS 433 (Mont. Dist. Ct. 1999).

At first glance, improved irrigation efficiency would appear to fit within the Salvaged Water statute. By switching to sprinklers (the "application of water-saving methods"), appropriators make more water available for use on their properties. Montana, however, urges that the statute only applies where an appropriator frees up water that otherwise would be unavailable for *anyone's* use. If someone downstream is using runoff from a field employing flood irrigation, a switch to sprinkler irrigation would not "make water available" under Montana's interpretation. In support of this interpretation, Montana notes that appropriation states have often defined "salvaged water" as "parts of a particular stream or other water supply that have been lost, as far as any beneficial use is concerned, to any of the established users, but are saved from further loss from the supply by artificial means and so are made available for use." 2 W. Hutchins, Water Rights Laws in the Nineteen Western States 565 (1971). Thankfully, it ultimately is unnecessary, as discussed below, to determine the correct meaning of Montana's Salvaged Water statute in order to resolve Wyoming's motion to dismiss Montana's claim regarding increased consumption.

D. Conclusion

Given the law of prior appropriation both at the time the Compact was negotiated and today, I conclude that the Compact does not prohibit pre-1950 Wyoming appropriators from increasing their consumption of water on the lands they were irrigating as of January 1, 1950 in the Tongue and Powder River Basins by changing their irrigation systems. Although neither the Montana nor Wyoming courts have expressly decided the exact issue presented, the Wyoming Supreme Court's decisions both before and after the negotiation of the Compact strongly indicate that Wyoming appropriators are free to increase consumption on

existing acreage through improved irrigation techniques.[8] No Montana case contradicts this rule; instead, Montana law is ultimately inconclusive. The appropriation law of other states does not suggest that Wyoming's rule is anomalous, although some courts might reach different results. As a consequence, the most reasonable interpretation of Article V(A), as applied in this context, is that it does not ban increased consumption on existing acreage as a result of improved irrigation.

Because the rule favors upstream appropriators, the rule favors Wyoming over Montana. According to Montana, increased consumption by pre-1950 Wyoming appropriators has already reduced the amount of water available to pre-1950 Montana appropriators during periods of low water flow. The rule, however, is not unreasonable. While the rule reduces the security of downstream appropriators who rely on return flow, it also encourages increased conservation (a goal that both Wyoming and Montana, like most western states, share) by giving farmers an incentive that they otherwise would not have to invest in new irrigation techniques. The potential loss in return flow available to pre-1950 Montana appropriators is also inherently limited. The rule covers only increased consumption on the lands that were being irrigated as of January 1, 1950. Any uses of conserved water for "beneficial uses on new lands or for other purposes" fall under Article V(B) and are subject to the restrictions for post-1950 water uses discussed in the Memorandum Opinion.

Considerations of practicality reinforce this rule and its incorporation into the Compact. As noted earlier, neither Montana nor Wyoming requires farmers to seek state approval before improving irrigation practices. If Montana were correct in its interpretation of the Compact, Wyoming would need to establish a continual process for reviewing changes

[8] Montana objects to the consideration of cases and statutes that postdate the negotiation and ratification of the Compact. See Montana Letter Brief, p. 7. *Binning*, of course, was decided before the Compact and, as discussed above, states that appropriators in Wyoming can lawfully increase consumption on existing acreage. Post-Compact law, however, is also relevant for at least two reasons. First, post-Compact law can help in interpreting and understanding the law that existed as of the Compact's inception. Second, as noted earlier, Article V(A) does not incorporate the law of appropriation as of any particular date. There is no indication in either the language or history of the Compact that it meant to freeze the law that governs pre-1950 appropriative rights as of the date of the Compact. If Montana and Wyoming were to adopt a rule in the future proscribing the adoption of new irrigation techniques to the detriment of downstream appropriators, the Compact arguably would incorporate that rule. The Supreme Court, however, does not need to address this latter issue in resolving Wyoming's Motion to Dismiss because there is no indication that the relevant law on increases in consumption has changed since the inception of the Compact.

in irrigation techniques by pre-1950 appropriators, as well as other actions such as crop changes that might increase consumption, in order to ensure that such actions did not increase on-farm consumption (or to try to find a supplemental source of water to make up the difference). However, as Congress reported in considering the Compact, one of the attributes of the Compact is that its "provisions are easily administered, and require no elaborate organization." Senate Rep. No. 883, supra, at 1, Joint App. at 12. The approach taken by the Compact "appears to be easily installed, workable, and not requiring the establishment of a large new organization for its operations." Id, at 8, Joint App. at 19.

Montana notes that it is "not necessarily alleging that individual Wyoming appropriators should not be able to increase efficiency and therefore consumptive use on their lands, if otherwise permitted by Wyoming law." Montana Letter Brief, pp. 12-13. Instead, it seeks only to require Wyoming to provide the same supply of water for pre-1950 Montana rights "as were being supplied when the Compact was adopted," and says that Wyoming is free to do this in any way that it wishes. Id., p. 13. Because the return flows are presumably of the greatest importance to pre-1950 Montana appropriators when there are no post-1950 rights upon which to call, however, it is difficult to see how Wyoming could meet what Montana claims is Wyoming's obligation without continually overseeing actions by pre-1950 Wyoming appropriators that might change consumption and without restricting the right of pre-1950 appropriators to engage in such actions.

II. INTERSTATE TRIBUTARIES

In originally opposing Montana's motion for leave to file this action, Wyoming argued that "Montana cannot complain about the specific Wyoming reservoirs it discusses in its brief" because the reservoirs are located on tributaries to, rather than the main stems, of the Tongue and Powder River, which, according to Wyoming, are not governed by the Compact. Wyoming's Brief in Opposition to Motion for Leave to File Bill of Complaint, pp. 21-22. In response to my question at the hearing on Wyoming's Motion to Dismiss, Wyoming's counsel indicated that this was an issue that still needed to be addressed. Hearing Trans., at 125, line 21 to 127, line 20. The Memorandum Opinion therefore addressed the issue and concluded that Article V(A) "prohibits new diversions of water for

storage facilities on tributaries to the Powder and Tongue rivers if the diversions interfere with pre-1950 appropriative rights in Montana." Memorandum Opinion, pp. 29-30.

Wyoming asks that I delete the paragraph of the Memorandum Opinion that addresses and decides this issue. State of Wyoming's Letter Brief Commenting on Special Master's Memorandum Opinion on Wyoming's Motion to Dismiss ("Wyoming Letter Brief"), pp. 4-5. Wyoming makes basically four arguments. First, Wyoming argues that resolution of the issue was not necessary to resolve their Motion to Dismiss and that, in fact, they had not raised the issue in any of their papers regarding the Motion to Dismiss. Second, Wyoming argues that its counsel had not suggested, or intended to suggest, that the tributaries issue should be resolved as part of the Motion to Dismiss but had indicated instead that factual development would be helpful in resolving the issue. Third, Wyoming observes that it has not had an opportunity to fully brief the issue. Finally, Wyoming urges that the issue is not appropriate for resolution in a motion to dismiss without any factual investigation.

There do not appear to be any factual issues that would prevent resolving the tributaries issue prior to discovery. The issue would appear to be a purely legal question that not only is appropriate for prompt resolution but where quick resolution would promote judicial efficiency. As noted earlier, resolving legal issues such as Article V(A)'s applicability to storage facilities on tributaries to the Powder and Tongue rivers can help speed adjudication on the merits and save the parties unnecessary expense in discovery and later proceedings. See supra, p. 4. At the same time, Wyoming is correct that resolution of the tributaries issue would not appear to be essential to resolving its Motion to Dismiss. More importantly, Wyoming has not had an opportunity to fully brief the issue, and I am reluctant to resolve it over Wyoming's objection without that briefing.

I will therefore exclude the final paragraph of section III.C.2 of the Memorandum Opinion, at pages 29-30, from the First Interim Report to the Supreme Court. Because of the value of resolving this issue at an early stage, however, I would invite either Montana or Wyoming to bring a motion for summary judgment on this issue either before or after the filing of the First Interim Report. Resolution of the issue at an early stage is in the best

interest of both states. If Montana brings such a motion, of course, Wyoming is free to explain why it believes that the issue should await full discovery.

III. CLARIFICATION OF PARAGRAPH 3 OF THE CONCLUSIONS

In its Motion to Dismiss, Wyoming challenged what it labeled Montana's "depletion" theory of the Compact (what Wyoming now calls the "consumption/depletion concept"). See Wyoming's Brief in Support of Motion to Dismiss Bill of Complaint, pp. 39-42. Wyoming asks that I supplement my numbered conclusions at pages 41-43 of the Memorandum Opinion to specifically "dismiss" the "consumption/depletion concept." Wyoming Letter Brief, p. 3. In Wyoming's view, this would help promote finality and efficiency in this proceeding. Id.

The Memorandum Opinion discusses in detail the reasons for concluding that (1) the Compact protects pre-1950 appropriative rights in Montana from new diversions and withdrawals in Wyoming subsequent to January 1, 1950, and (2) Wyoming must ensure that new diversions or withdrawals in Wyoming not interfere with pre-1950 appropriative rights in Montana (except where Montana can remedy shortages through purely intrastate means that do not prejudice Montana's other rights under the Compact). In particular, the Memorandum Opinion notes that the Compact does not require Wyoming to deliver a specific, fixed quantity of water to its border with Montana or limit Wyoming to a specific, fixed level of consumptive use. See Memorandum Opinion, p. 20. The Memorandum Opinion, along with this Supplemental Opinion and the First Interim Report to the United States Supreme Court, will inform all further proceedings in this action, except to the extent that the United States Supreme Court modifies them in any future decisions or opinions in this case.

The conclusions in the Memorandum Opinion address the specific claims for relief in Montana's Bill of Complaint. Because Montana has not pleaded a distinct claim based on a "depletion/consumption concept," no additional conclusion is needed or appropriate.

IV. SUMMARY

Having reviewed the letter briefs and related law, I reconfirm the conclusions in section IV of the Memorandum Opinion. The final paragraph of section III(C)(2) of the Memorandum Opinion, at pages 29-30, will not be included in the First Interim Report to the Supreme Court. I encourage the parties to seek a resolution of the tributaries issue addressed in that paragraph as soon as possible through a motion for summary judgment. Section I of this Supplemental Opinion will supplement and, in its discussion of Montana's "salvaged water" statute (Mont. Code Ann. § 45-2-419), replace section III.C.4 of the Memorandum Opinion.

Having addressed all of the issues in Wyoming's Motion to Dismiss and the additional matters raised by Montana and Wyoming in its letter briefs, I will now prepare my First Interim Report to the United States Supreme Court. The portion of the report dealing with Wyoming's Motion to Dismiss will incorporate the Memorandum Opinion, as supplemented or modified by this Supplemental Opinion, along with any additional points and discussions needed to provide relevant background and guidance for the Court.